

LISTING OF CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended) A knee prosthesis, comprising a femoral prosthetic part which forms a pair of condylar sliding surfaces, a tibial part which has tibial sliding surfaces configured for cooperating with and rotating relative to the condylar sliding surfaces, and a coupling part which connects the femoral and tibial parts so that they rotate about a rotation axis approximately parallel to a tibial shaft when implanted,

wherein the tibial sliding surfaces having areas of normal contact which, when the femoral and tibial parts have the same anteroposterior alignment, cooperate with corresponding condylar sliding surfaces, and

wherein the tibial sliding surfaces have first further areas in front of the areas of normal contact sloping upward with a radius of curvature greater than the radius of curvature of the portion of the corresponding condylar sliding surface cooperating during flexion with the tibial sliding surface and second further areas sloping upward behind the areas of normal contact,

the first and second further areas being configured relative to the areas of normal contact in such a way that, in the event of rotation of the tibial part of the prosthesis relative to the femoral part about the rotation axis when implanted, each of the condylar sliding surfaces remains in load-transmitting contact with the first or second further area of its corresponding associated tibial sliding surface during the rotation.

2. (Previously Presented) The prosthesis as claimed in claim 1, wherein the rotation axis is fixed in relation to the femoral and tibial prosthesis parts in an anteroposterior direction.

3. (Canceled)

4. (Previously Presented) The prosthesis as claimed in claim 1, wherein a portion of the condylar sliding surface corresponding to the tibial sliding surface has a radius of curvature that is substantially constant in a flexion plane.

5. (Previously Presented) The prosthesis as claimed in claim 2, wherein a portion of the condylar sliding surface corresponding to the tibial sliding surface has a radius of curvature that is substantially constant in a flexion plane.

6. (Canceled)